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What is claimed is:

1. A compound having the structure

$$I-X-(C=Y)_m-L-A$$

wherein I is an HIV protease inhibitor radical, X is O or NH, Y is O, S or NH, m is 0 or 1, L is a linker consisting of from 0 to 40 carbon atoms arranged in a straight chain or a branched chain, saturated or unsaturated, and containing up to two ring structures and 0-20 heteroatoms, with the proviso that not more than two heteroatoms may be linked in sequence, and A is an activated functionality chosen from the group consisting of active esters, isocyanates, isothiocyanates, thiols, imidoesters, anhydrides, maleimides, thiolactones, diazonium groups and aldehydes.

- 2. The compound of claim 1 wherein the protease inhibitor is selected from the group consisting of ritonavir, saquinavir, amprenavir, indinavir, nelfinavir, lopinavir, and atazanavir.
- 3. The compound of claim 1 wherein X is O, Y is O and m is 1.
- 4. The compound of claim 1 wherein X is NH, Y is O and m is 1.
- 5. The compound of claim 1 wherein X is O, Y is O, m is 1 and the first atom in L adjacent to C=Y is N.
- 6. The compound of claim 1 wherein X is NH, Y is O, m is 1 and the first atom in L adjacent to C=Y is N.
- 7. The compound of claim 1 wherein X is NH, Y is S, m is 1 and the first atom in L adjacent to C=Y is N.
- 8. The compound of claim 1 wherein X is NH, Y is NH and m is 1.
- 9. The compound of claim 1 wherein X is O and m is 0.

- 10. The compound of claim 1 wherein X is NR wherein R is H or lower alkyl and m is 0.
- 11. The compound O^c-(succinimido-oxycarbonyl-butyryl-aminocaproyl)-ritonavir (1C).
- 12. The compound O^c-[4'-(succinimido-oxycarbonyl)-benzoyl-aminocaproyl]-ritonavir (1D).
- 13. The compound O^c-(succinimido-oxycarbonyl-butyryl-aminocaproyl)-saquinavir (2C).
- 14. The compound O^c-[4'-(succinimido-oxycarbonyl)-benzoyl-aminocaproyl]-saquinavir (2F).
- 15. The compound O^c-(succinimido-oxycarbonyl-butyryl-aminocaproyl)-amprenavir (3C).
- 16. The compound O^c-[4'-(succinimido-oxycarbonyl)-benzoyl-aminocaproyl]-amprenavir (**3D**).
- 17. The compound O^c-(succinimido-oxycarbonyl-butyryl-aminocaproyl)-indinavir (4E).
- 18. The compound O^c-[4'-(succinimido-oxycarbonyl)-benzoyl-aminocaproyl]-indinavir (4F).
- 19. The compound O^c-(succinimido-oxycarbonyl-butyryl-aminocaproyl)-nelfinavir (5D).
- 20. The compound O^c-[4'-(succinimido-oxycarbonyl)-benzoyl-aminocaproyl]-nelfinavir (5E).
- 21. The compound O^c-(succinimido-oxycarbonyl-butyryl-aminocaproyl)-lopinavir (6C).
- 22. The compound O^c-[4'-(succinimido-oxycarbonyl)-benzoyl-aminocaproyl]-lopinavir (**6D**).

- 23. The compound O^c-(succinimido-oxycarbonyl-butyryl-aminocaproyl)-atazanavir (7C).
- 24. The compound O^c-[4'-(succinimido-oxycarbonyl)-benzoyl-aminocaproyl]-atazanavir (**7D**).
- 25. The compound O^c-[4'-(succinimido-oxycarbonyl)-phenyl-aminocarbonyl]-saquinavir (2U).
- 26. The compound O^c-(succinimido-oxycarbonyl-methylaminocarbonyl)-saquinavir (2L).
- 27. The compound O^c-[4'-(succinimido-oxycarbonyl)-phenyl-methylamino-^{co}-glycyl-carbonyl]-saquinavir (2Y).
- 28. The compound O^c-(succinimido-oxycarbonyl-propylamino-^{co}-glycyl-glycyl-glycyl-carbonyl)-nelfinavir (**5S**).
- 29. The compound O^c-(succinimido-oxycarbonyl-methyl)-saquinavir (2BB).
- 30. The compound O^{ar}-MEM-O^c-(succinimido-oxycarbonyl-methyl)-nelfinavir (50).
- 31. A compound having the structure

$$[I-X-(C=Y)_m-L-Z]_n-P$$

wherein I is an HIV protease inhibitor radical, X is O or NH, Y is O, S, or NH, m is 0 or 1, L is a linker comprising 0 to 40 carbon atoms arranged in a straight chain or a branched chain, saturated or unsaturated, and further comprising up to two ring structures and 0-20 heteroatoms, with the proviso that not more than two heteroatoms are linked in sequence, Z is a moiety selected from the group consisting of -CONH-, -NHCO-, -NHCONH-, -NHCSNH-, -OCONH-, -NHOCO-, -S-, -

- of polypeptides, polysaccharides and synthetic polymers, and n is a number from 1 to 50 per 50 kilodaltons molecular weight of P.
- 32. The compound of claim 31 wherein the protease inhibitor is selected from the group consisting of ritonavir, saquinavir, amprenavir, indinavir, nelfinavir, lopinavir, and atazanavir.
- 33. The compound of claim 31 wherein P is an aminated dextran.
- 34. The compound of claim 31 wherein P is bovine serum albumin.
- 35. The compound of claim 31 wherein P is keyhole limpet hemocyanin.
- 36. The compound of claim 31 wherein P is *Limulus polyphemus* hemocyanin.
- 37. The compound of claim 31 wherein P is bovine thyroglobulin.
- 38. The compound O^c-(succinimido-oxycarbonyl-butyryl-aminocaproyl)-ritonavir conjugate with LPH (1E).
- 39. The compound O^c-[4'-(succinimido-oxycarbonyl)-benzoyl-aminocaproyl]-ritonavir conjugate with BSA (1**F**).
- 40. The compound O^c-(succinimido-oxycarbonyl-butyryl-aminocaproyl)-saquinavir conjugate with KLH (2E).
- 41. The compound O^c-[4'-(succinimido-oxycarbonyl)-benzoyl-aminocaproyl]-saquinavir conjugate with BSA (**2G**).
- 42. The compound O^c-(succinimido-oxycarbonyl-butyryl-aminocaproyl)-amprenavir conjugate with KLH (3E).
- 43. The compound O^c-[4'-(succinimido-oxycarbonyl)-benzoyl-aminocaproyl]amprenavir conjugate with BSA (3F).

- 44. The compound O^c-[(succinimido-oxycarbonyl)-butyryl-aminocaproyl]-indinavir conjugate with KLH (4G).
- 45. The compound O^c-[4'-(succinimido-oxycarbonyl)-benzoyl-aminocaproyl]-indinavir conjugate with BSA (4H).
- 46. The compound O^c-(succinimido-oxycarbonyl-butyryl-aminocaproyl)-nelfinavir conjugate with KLH (5F).
- 47. The compound O^c-[4'-(succinimido-oxycarbonyl)-benzoyl-aminocaproyl]-nelfinavir conjugate with BSA (**5G**).
- 48. The compound O^c-(succinimido-oxycarbonyl-butyryl-aminocaproyl)-lopinavir conjugate with KLH (**6F**).
- 49. The compound O^c-[4'-(succinimido-oxycarbonyl)-benzoyl-aminocaproyl]-lopinavir conjugate with BSA (6E).
- 50. The compound O^c-[4'-(succinimido-oxycarbonyl)-benzoyl-aminocaproyl]- atazanavir conjugate with BSA (7F).
- 51. The compound O^c-(succinimido-oxycarbonyl-butyryl-aminocaproyl)-atazanavir conjugate with KLH (**7E**).
- 52. A compound having the structure

$$[I-X-(C=Y)_m-L-Z]_n-Q$$

wherein I is an HIV protease inhibitor radical, X is O or NH, Y is O, S, or NH, m is 0 or 1, L is a linker comprising 0 to 40 carbon atoms arranged in a straight chain or a branched chain, saturated or unsaturated, and further comprising up to two ring structures and 0-20 heteroatoms, with the proviso that not more than two heteroatoms are linked in sequence, Z is a moiety chosen from the group consisting of -CONH-, -NHCO-,-NHCONH-, -NHCSNH-, -OCONH-, -NHOCO-, -S-, -

NH(C=NH)-, -N=N-, -NH-, and O, Q is selected from the group consisting of non-isotopic labels, and n is a number from 1 to 50 per 50 kilodaltons molecular weight of Q.

- 53. The compound of claim 52 wherein the protease inhibitor is selected from the group consisting of ritonavir, saquinavir, amprenavir, indinavir, nelfinavir, lopinavir, and atazanavir.
- 54. The compound of claim 52 wherein Q is biotin.
- 55. The compound O^c-[4'-(1-biotinyl-amino-3,6-dioxa-octylamino)-terephthaloyl-aminocaproyl]-amprenavir (3J).
- 56. The compound O^c-[4'-(1-biotinyl-amino-3,6-dioxa-octylamino)-terephthaloyl-aminocaproyl]-lopinavir (6G).
- 57. The compound O^c-[4'-(1-biotinyl-amino-3,6-dioxa-octylamino)-terephthaloyl-aminocaproyl]-ritonavir (1J).
- 58. The compound O^c-[4'-(1-biotinyl-amino-3,6-dioxa-octylamino)-terephthaloyl-aminocaproyl]-indinavir (4I).
- 59. An antibody generated in response to a compound having the structure:

$$[I-X-(C=Y)_m-L-Z]_n-P$$

wherein I is an HIV protease inhibitor radical, X is O or NH, Y is O, S, or NH, m is 0 or 1, L is a linker comprising 0 to 40 carbon atoms arranged in a straight chain or a branched chain, saturated or unsaturated, and further comprising up to two ring structures and 0-20 heteroatoms, with the proviso that not more than two heteroatoms are linked in sequence, Z is a moiety selected from the group consisting of -CONH-, -NHCO-, -NHCONH-, -NHCSNH-, -OCONH-, -NHOCO-, -S-, -

NH(C=NH)-, -N=N-, -NH-, and on the group consisting of polypeptides, a polysaccharides, and synthetic polymers, and n is a number from 1 to 50 per 50 kilodaltons molecular weight of P.

- 60. The antibody of claim 59 wherein the protease inhibitor is selected from the group consisting of ritonavir, saquinavir, amprenavir, indinavir, nelfinavir and lopinavir.
- 61. An antibody generated in response to the compound of claim 38.
- 62. An antibody generated in response to the compound of claim 40.
- 63. An antibody generated in response to the compound of claim 42.
- 64. An antibody generated in response to the compound of claim 44.
- 65. An antibody generated in response to the compound of claim 46.
- 66. An antibody generated in response to the compound of claim 48.
- 67. A monoclonal antibody specific for saquinavir having less than 10% cross-reactivity with nelfinavir, indinavir, amprenavir, ritonavir and lopinavir.
- 68. A monoclonal antibody specific for nelfinavir having less than 10% cross-reactivity with saquinavir, indinavir, amprenavir, ritonavir and lopinavir.
- 69. A monoclonal antibody specific for indinavir having less than 10% cross-reactivity with saquinavir, nelfinavir, amprenavir, ritonavir and lopinavir.
- 70. A monoclonal antibody specific for amprenavir having less than 10% cross-reactivity with saquinavir, nelfinavir, indinavir, ritonavir and lopinavir.
- 71. A monoclonal antibody specific for lopinavir having less than 10% cross-reactivity with saquinavir, nelfinavir, amprenavir, ritonavir and indinavir.

- 72. A monoclonal antibody specific for ritonavir having less than 10% cross-reactivity with saquinavir, nelfinavir, amprenavir, indinavir and lopinavir.
- 73. Murine hybridoma SAQ 10.2.1 having ATCC No. PTA-3973.
- 74. Murine hybridoma SAQ 14.1.1 having ATCC No. PTA-3974.
- 75. Murine hybridoma NEL 5.4.1 having ATCC No. PTA-4475.
- 76. Murine hybridoma <INDIN> M 1.003.12 having DSMZ No. ACC2547.
- 77. Murine hybridoma <INDIN> M 1.158.8 having DSMZ No. ACC2546.
- 78. Murine hybridoma <AMPREN> M 1.1.52 having DSMZ No. ACC 2612.
- 79. Murine hybridoma <LOPIN> M 1.1.85 having DSMZ No. ACC 2611.
- 80. Murine hybridoma <RITON> M 1.5.44 having DSMZ No. ACC 2613.